

Method and system for management of resource leases
in an application framework system

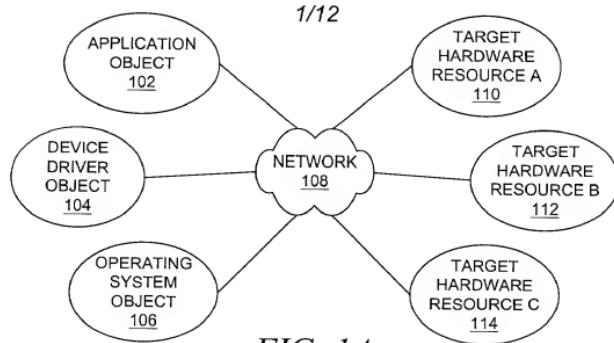


FIG. 1A
(PRIOR ART)

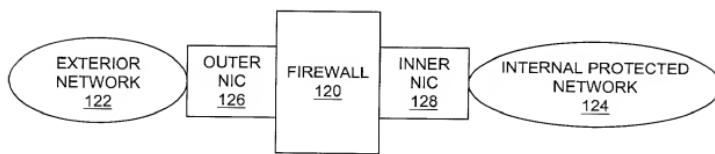


FIG. 1B
(PRIOR ART)

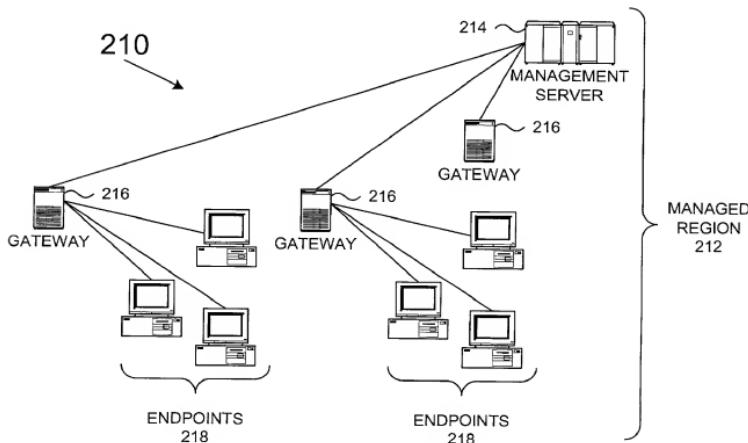


FIG. 2A

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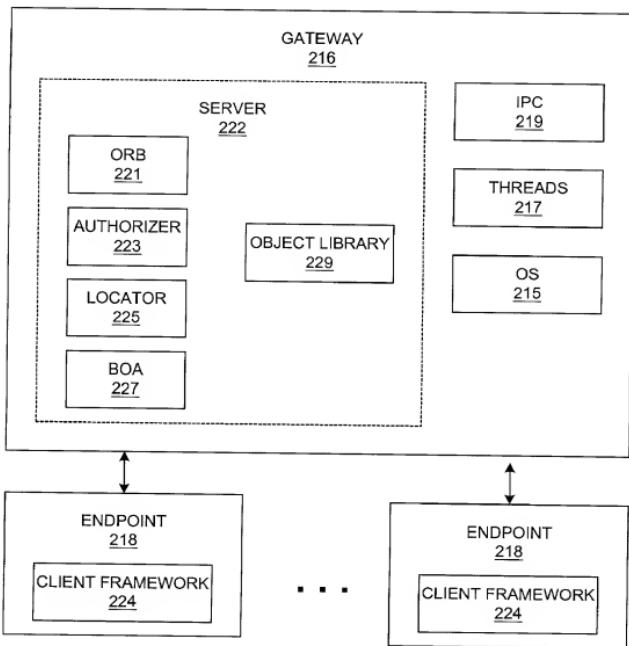


FIG. 2B

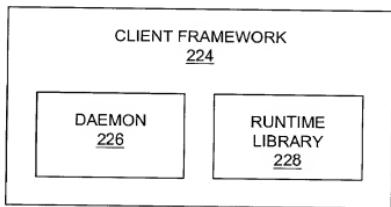


FIG. 2C

Method and system for management of resource leases
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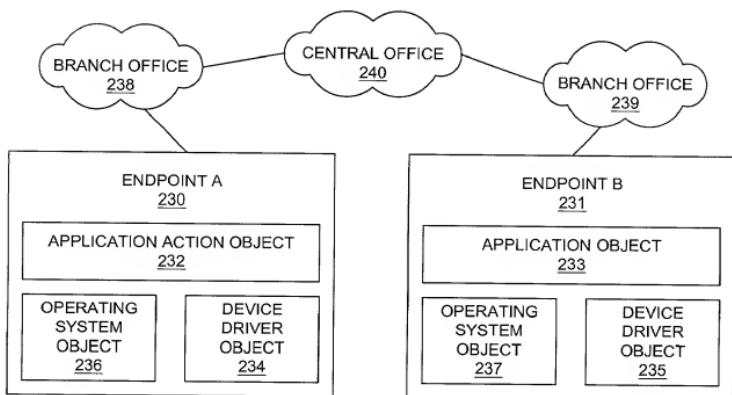


FIG. 2D

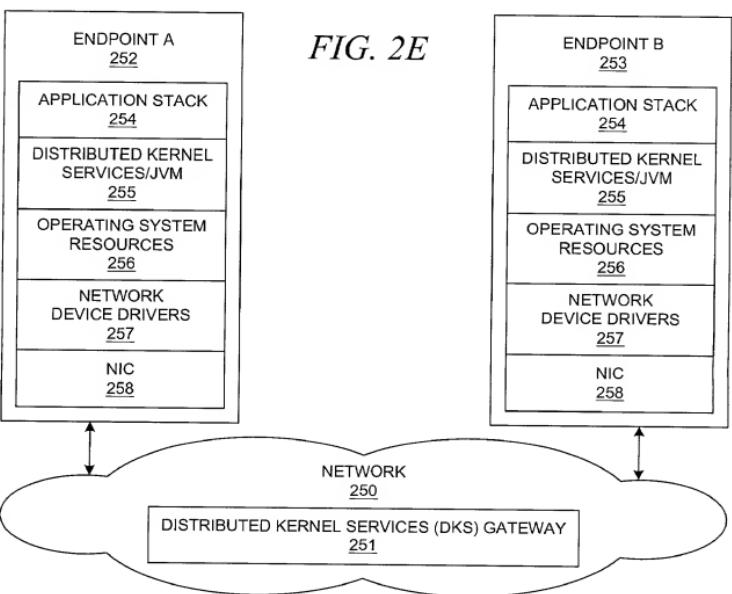


FIG. 2E

Method and system for management of resource leases
in an application framework system

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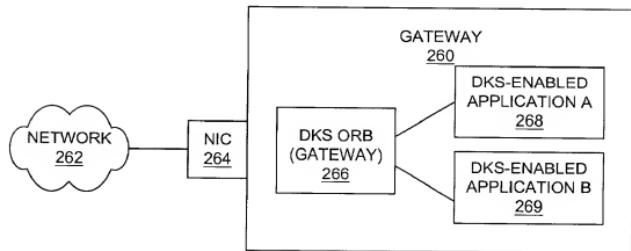


FIG. 2F

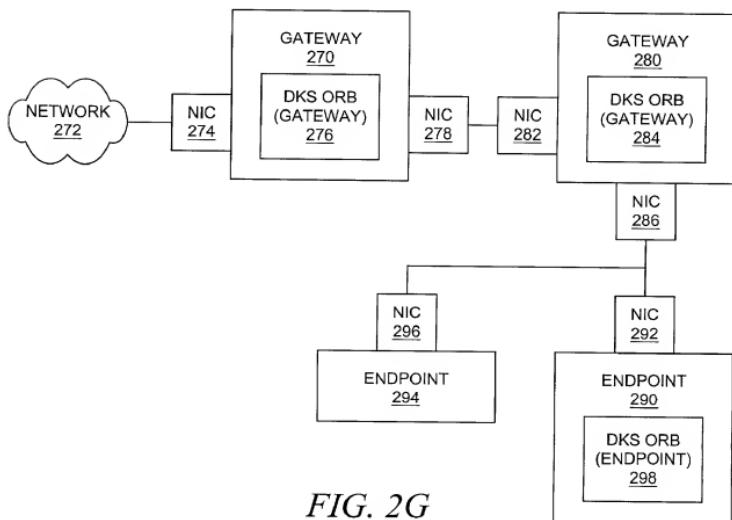


FIG. 2G

Method and system for management of resource leases
in an application framework system

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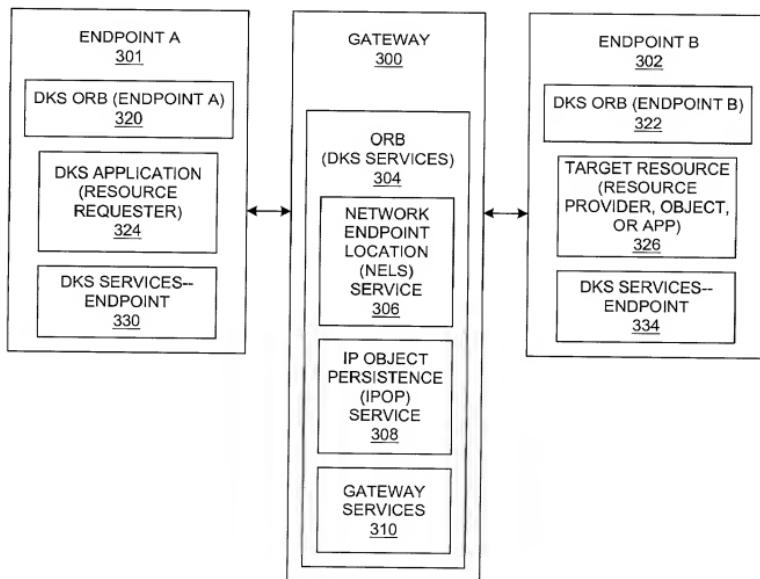


FIG. 3

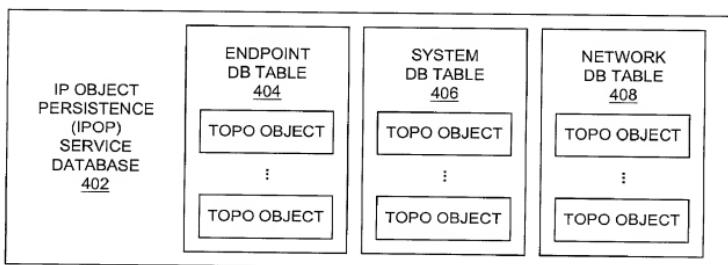


FIG. 4

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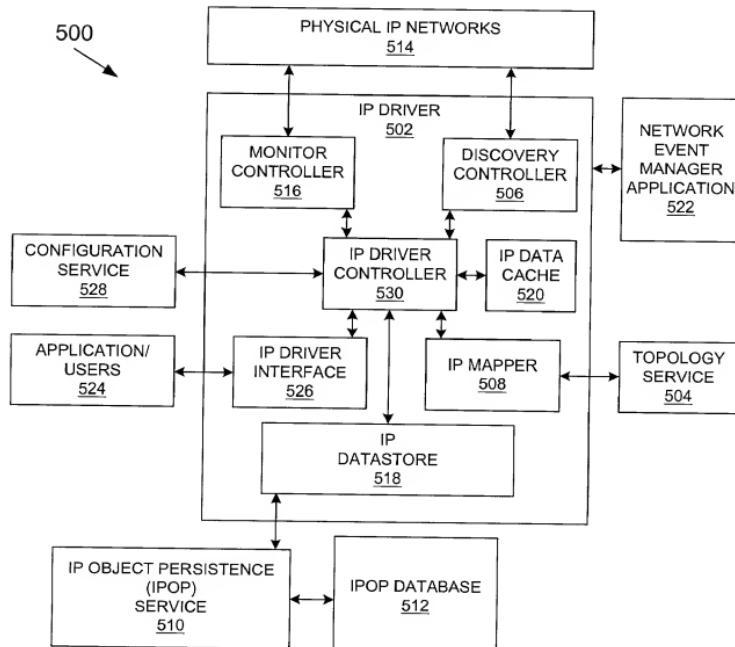


FIG. 5

```
CLASS ACTION_OBJECT {  
    // CONSTRUCTOR  
    ACTION_OBJECT( LONG IPADDRESS, SHORT VIRTUALPRIVATENETWORKADDRESS )  
    THROWS BADADDRESS ...  
  
    .  
  
    .  
  
    VOID PERFORMACTION( ) // EXECUTES ACTION METHOD  
    .  
}
```

FIG. 7B

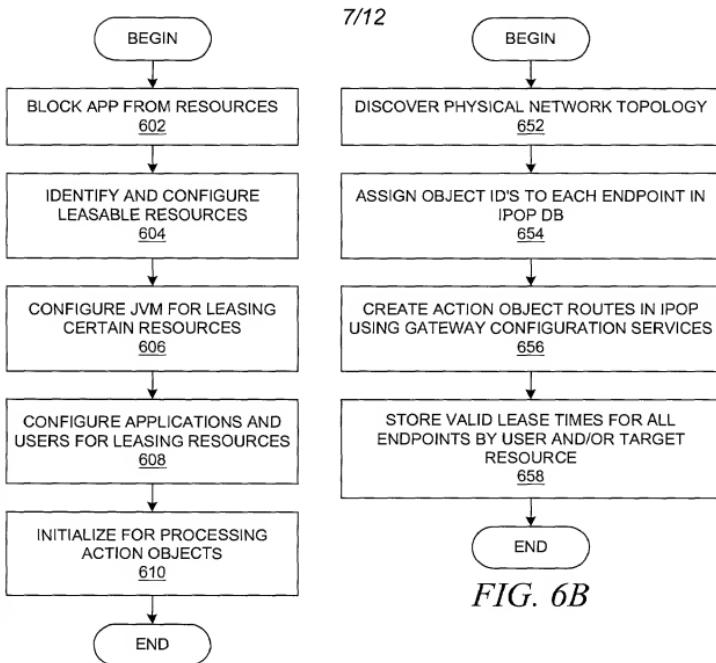


FIG. 6A

```

CLASS LEASE_ACTION_OBJECT EXTENDS ACTION_OBJECT {

    // CONSTRUCTOR
    LEASE_ACTION_OBJECT( LONG IPADDRESS,
        SHORT VIRTUALPRIVATENETWORKADDRESS, INT LEASETIME,
        THROWS BADADDRESS, LEASETIMENOTACCEPTABLE_EXCEPTION,
        LEASEBANDWIDTHMUSTBEREDUCED_EXCEPTION,
        LEASETERMINATED_EXCEPTION, ... )

    . . .

    PUBLIC INT LEASETIME;      // STORE LEASE TIME

    STATIC FINAL INFINITELEASETIME = -1;
    STATIC FINAL ZEROLEASETIME = 0;
}

```

FIG. 7C

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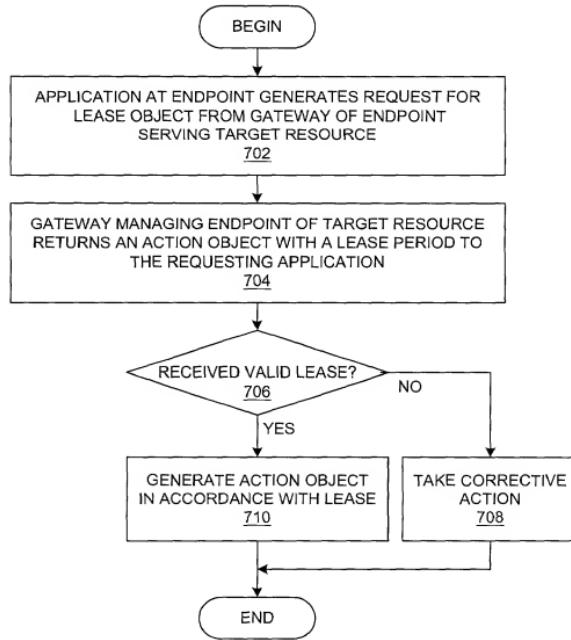


FIG. 7A

```

CLASS LEASETIMENOTACCEPTABLE_EXCEPTION EXTENDS EXCEPTION {
    .
    .
}

CLASS LEASEBANDWIDTHMUSTBEREDUCED_EXCEPTION EXTENDS EXCEPTION {
    .
    .
}

CLASS LEASETERMINATED_EXCEPTION EXTENDS EXCEPTION {
    .
    .
}
    
```

FIG. 7D

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```

XYZ_APPLICATION_METHOD {
    LEASE_ACTION_OBJECT      MYLEASEDACTIONOBJECT = NULL;

    .
    .

    MYLEASEDACTIONOBJECT = NEW LEASEDACTIONOBJECT( . . . );
    MYLEASEDACTIONOBJECT.PERFORMACTION( . . . );
}

```

FIG. 7E

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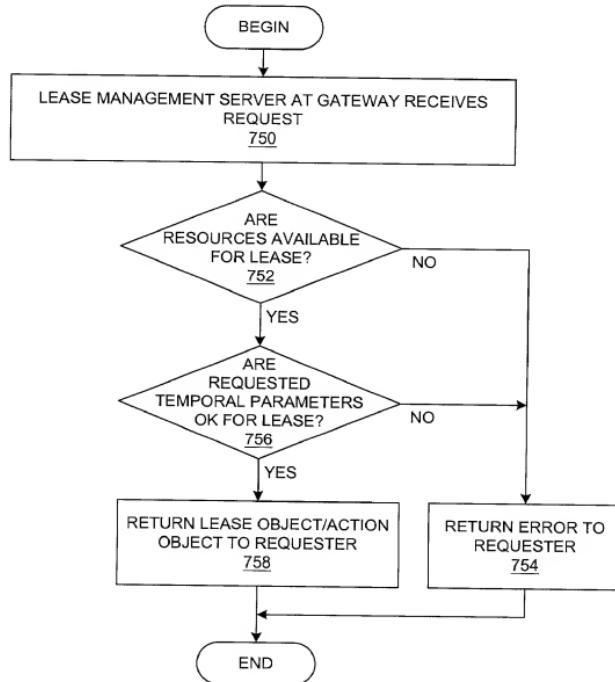


FIG. 7F

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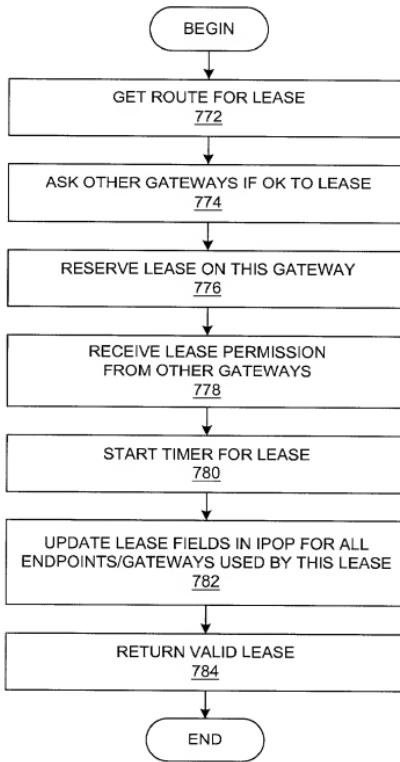


FIG. 7G

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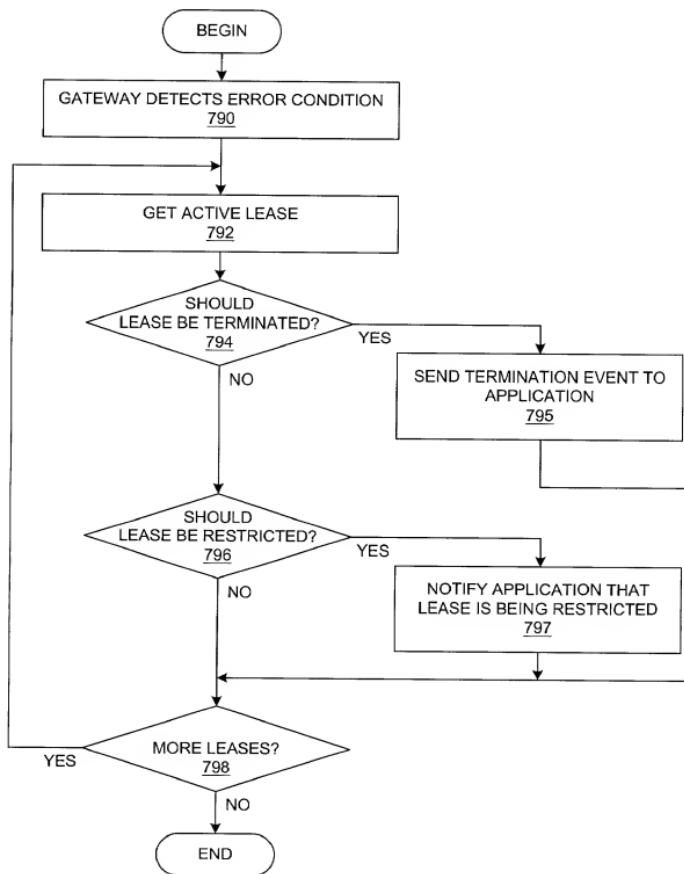


FIG. 7H

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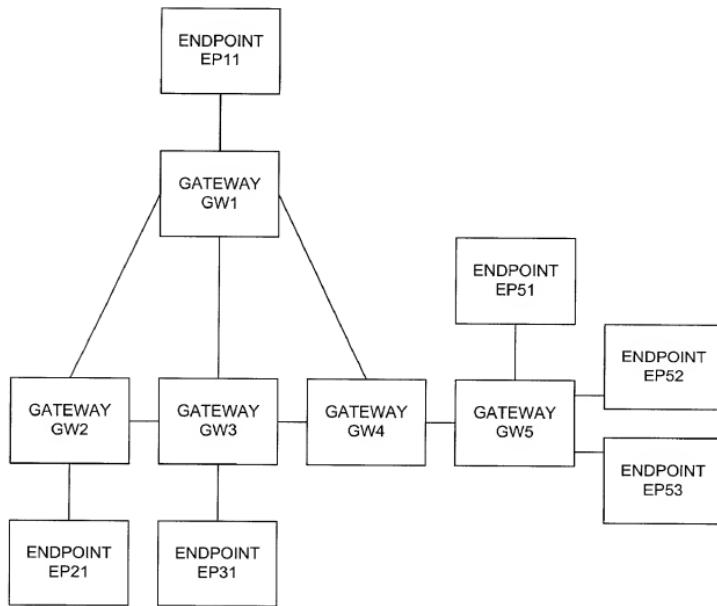


FIG. 8